



## ***2008 Annual Drinking Water Quality Report City of Freeport***

*This report shows our water quality results and what they mean.*

*We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is ground water from five (5) wells. The wells draw from the Floridan Aquifer. Because of the excellent quality of our water, the only treatment required is chlorine for disinfection purposes.*

*In 2008 the Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are three (3) potential sources of contamination identified for this system with low and moderate susceptibility levels. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp) or they can be obtained from City Hall, City of Freeport.*

*If you have any questions about this report or concerning your water utility, please contact **Greg Yancey, Water Operator, City of Freeport**. We encourage our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the 2<sup>nd</sup> Tuesday and 4<sup>th</sup> Thursday @ 7:00PM at the Council Chambers at City Hall.*

*City of Freeport Water System routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2008. Data obtained before January 1, 2008, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.*

*In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:*

*Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.*

*Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.*

*Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.*

*Initial Distribution System Evaluation (IDSE): An important part of the Stage 2 Disinfection Byproducts Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR.*

*Maximum residual disinfectant level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.*

*Maximum residual disinfectant level goal or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.*

*“ND” means not detected and indicates that the substance was not found by laboratory analysis.*

*Parts per billion (ppb) or Micrograms per liter (µg/l) – one part by weight of analyte to 1 billion parts by weight of the water sample.*

*Parts per million (ppm) or Milligrams per liter (mg/l) – one part by weight of analyte to 1 million parts by weight of the water sample.*

*Picocurie per liter (pCi/L) - measure of the radioactivity in water.*

## 2008 CONTAMINANTS TABLE

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
<b>Radiological Contaminants</b>							
Alpha emitters (pCi/L)	June 08	N	3.7	ND-3.7	0	15	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L)	June 08	N	0.8	0.1-0.8	0	5	Erosion of natural deposits
<b>Inorganic Contaminants</b>							
Barium (ppm)	June 08	N	0.026	0.008-0.026	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	June 08	N	0.09	ND-0.09	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm
Lead (point of entry) (ppb)	June 08	N	2.0	ND-2.0	n/a	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Mercury (inorganic) (ppb)	June 08	N	0.2	ND-0.2	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Sodium (ppm)	June 08	N	3.0	2.0-3.0	N/A	160	Salt water intrusion, leaching from soil

Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
<b>Stage 1 Disinfectants and Disinfection By-Products</b>							
Chlorine (ppm)	Jan-Dec 08	N	0.66	0.52-0.8	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	Aug 08	N	0.78	0.6-0.9	NA	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	Aug 08	N	8.8	ND-19.2	NA	MCL = 80	By-product of drinking water disinfection

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
<b>Lead and Copper (Tap Water)</b>							
Copper (tap water) (ppm)	Jun-Sep 08	N	0.1	0 of 10	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	Jun-Sep 08	N	3.0	0 of 10	0	15	Corrosion of household plumbing systems, erosion of natural deposits

## SECONDARY CONTAMINANTS TABLE

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Highest Result	Range of Results	MCLG	MCL	Likely Source of Contamination
<b>Secondary Contaminants</b>							
Odor (threshold odor number)	June 08	Y	4.0	ND-4.0		3	Naturally occurring organics

*Due to an oversight, the City of Freeport collected an insufficient number of total coliform samples in January, 2008. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful, bacteria may be present. DEP notified the City it was in violation and was required to issue public notification in February, 2008 to this effect which was done by posting at City Hall, Freeport Post Office and local businesses. The sampling plan for the City was reviewed to assure that this mistake will not happen again.*

*The State of Florida Department of Environmental Protection (FDEP) sets drinking water standards for secondary contaminants, and has determined that Odor is an aesthetic concern at certain levels of exposure. Odor was sampled June 2008, and was found in a higher level than is allowed by the State Odor as a secondary contaminant and does not pose a health risk.*

*If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. City of Freeport is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.*

*The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.*

*Contaminants that may be present in source water include:*

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.*
- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.*
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.*
- (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.*
- (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.*

*In order to ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.*

*Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.*

*Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply, we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.*

***Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).***

*"We at the City of Freeport work around the clock to provide top quality water to every tap," said **Greg Yancey, Water Operator**. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.*